

## CLAIMS

We claim:

1. A beauty-wash product composition for delivery of enhanced visual benefits to the skin with specific optical attributes comprising:
  - a) from about 0.5% to about 90% of by wt. surfactant;
  - b) from 0.1 to 35% by wt. of solid particulate optical modifier which exhibits a specific set of optical properties, defined by  $\Delta L$ ,  $\Delta a^*$ ,  $\Delta b^*$ , change in reflectivity and/or change in opacity, and which, in combination with a deposition enhancement system, provides at least 5% change in at least one of said optical properties being targeted when said composition is applied to the skin;
  - c) from 0.1 to 25% by wt. of a deposition enhancement system, wherein, the deposition enhancement system enhances delivery to the skin of a target visual attribute by the optical modifier relative to a composition that has the same surfactant and optical modifier at the same concentration and that does not have the deposition enhancement system; and
  - d) from about 0.1% to 90% of a hydrophilic structural dispersant .
2. A composition according to claim 1 wherein the optical attribute affected by change of at least 5% in at least one of said optical

properties is chosen from skin shine, skin lightness, skin color, skin glow, skin radiance, skin optical uniformity, skin evenness and mixtures thereof.

3. A composition according to claim 1, comprising 20% to 75% by wt. surfactant.
4. A composition according to claim 1 wherein the skin site wherein the delivery of optical benefits is targeted is skin plateaus and/or crevices on skin.
5. A composition according to claim 1, comprising 0.2% to 25% by wt. optical modifier.
6. A composition according to claim 1 providing changes in one or multiple attributes wherein delivery of modifier provides change in defined values and/or percentages as noted below:  
 $\Delta L$  of from 0 to  $\pm 10$  L units, wherein said L units are defined by Hunter Lab Color Meter;  
 $\Delta a^*$  of from 0 to  $\pm 10$   $a^*$  units, wherein said  $a^*$  units are defined by Hunter Lab Color Meter;  
 $\Delta b^*$  of from 0 to  $\pm 10$   $b^*$  units, wherein said  $b^*$  units are defined by Hunter Lab Color Meter;  
reflectance change of 0 to  $\pm 300\%$  as defined by change in gloss measured from a gloss meter;  
opacity change of 0 to  $\pm 50\%$  measured in opacity contrast and defined as  $\Delta L$  divided by 60;

wherein at least one of the values noted is a change of at least 5% from the initial value prior to delivery of modifier.

7. A composition according to claim 1 providing change in shine or glow wherein delivery of modifier provides change in defined values as noted below:

$\Delta L$  of from 0 to  $\pm 10$  L units, wherein said L units are defined by Hunter Lab Color Meter;

change of reflectance of 0 to  $\pm 300\%$  as defined by change in gloss measured by a gloss meter;

change in opacity of 0 to  $\pm 20\%$  measured in opacity contrast defined by  $\Delta L$  divided by 60;

wherein  $\Delta a^*$  and  $\Delta b^*$  are  $\leq 2$  units and wherein at least one of L, reflectance or opacity is a change of at least 5% from initial value prior to delivery of modifier.

8. A composition according to claim 1 providing change in lightening, whitening, and/or color wherein delivery of modifier provides change in defined values as noted below:

$\Delta L$  of from 0 to  $\pm 10$  L units, wherein L units are defined by Hunter Lab Color Meter;

$\Delta a^*$  of from 0 to  $\pm 10$   $a^*$  units, wherein  $a^*$  units are defined by Hunter Lab Color Meter;

$\Delta b^*$  of from 0 to  $\pm 10$   $b^*$  units, wherein  $b^*$  units are defined by Hunter Lab Color Meter;

change in opacity of 0 to  $\pm 50\%$  measured by opacity contrast, wherein said contrast is defined by  $\Delta L$  divided by 60; wherein  $\Delta$  reflectance is  $\leq 10\%$ ,  $\Delta$  reflectance being measured as change in gloss where gloss is measured in a gloss meter; wherein at least one of L,  $a^*$ ,  $b^*$  or reflectance is a change of at least 5% from initial value prior to delivery of modifier.

9. A composition according to claim 1, providing change in skin optical uniformity, evenness, blurring and/or soft focus, wherein delivery of modifier provides change in defined value as noted below:
  - $\Delta L$  of from 0 to  $\pm 5$  units, wherein said L units are defined by Hunter Lab Color Meter; change in reflectance of 0 to  $\pm 100\%$  which is defined in gloss units measured by a gloss meter; change in 0 to  $\pm 50\%$ , measured in opacity contrast which is defined by  $\Delta L$  divided by 60; wherein  $\Delta a^*$  and  $\Delta b^*$  are  $\leq 2$  units.
10. A composition according to claim 1, wherein a mixture of one or more desired visual attributes is obtained by varying  $\Delta L$ ,  $\Delta a^*$ ,  $\Delta b^*$ ,  $\Delta$  reflectance and  $\Delta$  opacity values to fit into areas defining one or more such attributes.
11. A composition according to claim 1, wherein said optical modifier is a non colored or colored organic or inorganic material selected from organic pigments; inorganic pigments; polymers and fillers in turn selected from: titanium dioxide; zinc oxide; colored iron oxide;

chromium oxide, hydroxide or hydrate; alumina; silica; zirconia; barium sulfate; silicates; alkaloid polymers and derivatives thereof; polyalkylene; nylon; ultramarine; alkaline earth carbonate; talc; sericite; natural and synthetic mica; platy substrate coated with organic and inorganic materials; bismuth oxychloride; and mixtures thereof;

12. A composition according to claim 1, wherein said optical modifier is a UV sunscreen material with a  $D_{50} < 100$  nanometers
13. A composition according to claim 1, said optical modifier is defined as follows:

Exterior surface with refractive index of 1.3 to 4.0;

- a) geometry which is spheriodal, platy or cylindrical;;
- b)  $D_{50}$  of  $\leq 200$  microns in particle size;
- c) color which is obtained fluorescence color, absorption color and/or interference color.

14. A composition according to claim 7 wherein the particulate optical modifier is further defined by:

- a) an exterior surface of refractive index 1.8 to 4.0,
- b) geometry which are platy or cylindrical;
- c) dimensions of spheriodal particles of 0.1 to 200  $\mu\text{m}$ ; dimensions of platyparticles of 10 to 200  $\mu\text{m}$ ; and dimensions of cylindrical

J6895(C)

particles 10 to 200  $\mu\text{m}$  in length and 0.5 to 5.0  $\mu\text{m}$  in diameter;

and

d)  $D_{50}$  of  $\leq 200$  microns in particle size;

15. A composition according to claim 8 wherein the particulate optical modifier is further defined by:

a) an exterior surface of refractive index 1.3 to 4.0,

b) geometry which are platy or spheroidal;

c) diversions of spheroidal particles of 0.1 to 1  $\mu\text{m}$ ; and diversion of platy particles 1 to 30  $\mu\text{m}$ ;

d)  $D_{50}$  of  $\leq 30$  microns in particle size;

e) color by florescence, absorption and/or interference.

16. A composition according to claim 9 wherein the particulate optical modifier is further defined by:

a) an exterior surface of refractive index 1.3 to 2.0,

b) geometry which are spheroidal, platy, or cylindrical ;

c) dimensions of spheroidal particles of 0.1 to 200  $\mu\text{m}$ ; and dimension of platy particles 1 to 10  $\mu\text{m}$ ; dimension of cylindrical particles 1 to 10  $\mu\text{m}$  in length and 0.5 to 5.0  $\mu\text{m}$  in diameter; and

d)  $D_{50}$  of  $\leq 200$  microns in size;

17. A composition according to claim 1, wherein the deposition system comprises:

a) 0.1 to 1% by wt. cationic polymer or polymers having an average charge density  $\geq 1$  Meq/gram; and

- b) 0.1 to 30% by wt. anionic surfactant which forms precipitate with cationic polymer upon dilution.
18. A composition according to claim 17, wherein the precipitate is a floc which can be broken upon shear or rubbing to form a uniform and dispersed film on surface of skin.
19. A composition according to claim 17, wherein said anionic is C<sub>10</sub> to C<sub>24</sub> fatty acid soap, alkyl taurate, sulfosuccinate, alkyl sulfate, glycinate, sarcosinate or mixture thereof;
20. A composition according to claim 17, wherein said cationic polymer is selected from polyquaternium 6, polyquaternium 7, polyquaternium 16, quaternized vinyl pyrrolidone/methacrylate copolymers, hydroxypropylguar gums and mixtures thereof;
21. A composition according to claim 17, additionally comprising about 0.1 to 30% by wt. of a granular anionic polymer which is a natural alkaloid polymer;
22. A composition according to claim 21, wherein said polymer is starch and derivatives, cellulose and derivatives and mixtures thereof;
23. A composition according to claim 1, wherein the deposition enhancement system comprises:
- i) from about 0.1% to about 10% of a anionic polymer or polymers having an average charge density of at least 1.0 Meq/g.

- ii) from about 0.1% about 30% of a cationic surfactant which forms a precipitate with the anionic polymer upon dilution;
- 24. A composition according to claim 23, wherein the precipitate is floc which can be broken up upon shear or rubbing and form a uniform and dispersed film on the surface of the skin;
- 25. A composition according to claim 23, wherein the cationic surfactant is selected from the group consisting of quaternary amine surfactants, amphoteric surfactants and mixtures thereof;
- 26. A composition according to claim 25, wherein amphoteric surfactants are betaines;
- 27. A composition according to claim 23, wherein the anionic polymer is selected from the group consisting of polyacrylates, crosslinked polyacrylates, polyurethanes, alkaloid derived polymers and mixtures thereof;
- 28. A composition according to claim 23, additionally comprising about 0.1% to about 30% of a granular anionic polymer which is a natural alkaloid polymer;
- 29. A composition according to claim 1, wherein the deposition enhancement system comprises:



J6895(C)

- i) from about 0.1% to about 30% of an anionic, cationic, amphoteric nonionic surfactants and combinations thereof.
  - ii) from about 0.1% to about 30% of a hydrophobically modified anionic, cationic amphoteric polymer where upon dilution forms a hydrogel or gel emulsion precipitate
30. A composition according to claim 29, wherein the precipitate is a floc which can be broken up upon shear or rubbing and form a uniform and dispersed film on the surface of the skin.
31. A composition according to claim 11, wherein optical particles of interest contain a surface modification selected from amino acids, proteins, fatty acids, lipids, phospholipids, anionic and/or cationic oligomers/polymers and mixtures thereof;
32. A composition according to claim 1, wherein the particles are dispersed on the skin in that less than 30% of the particles have a size of 10 times or more than the  $D_{50}$  particle size as measured by optical microscopy;